

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) ~~Component~~ A component for a static micromixer in the form of a disk (1) ~~which comprising:~~

~~has~~ at least one inlet opening (2) for the introduction of at least one feed stream into a linking channel (3) disposed in the plane of the disk and at least one outlet opening (4) for the outflow of the feed stream into a mixing zone (5) disposed in the plane of the disk,

wherein the inlet opening (2) is connected with the outlet opening (4) in a communicating manner through the linking channel (3) disposed in the plane of the disk, and

wherein the linking channel (3), immediately before opening into the mixing zone (5), is divided by microstructure units (6) into two or more part channels (7), the widths of the part channels being in the millimeter to submillimeter range and being smaller than the width of the mixing zone (5).

2. (currently amended) ~~Component~~ The component as defined in claim 1, ~~characterized in that~~ wherein the widths of the part channels (7) at their openings into the mixing zone are from 1 μ m to 2 mm.

3. (currently amended) ~~Component~~ The component as defined in claim 1, ~~characterized in that~~ wherein the ratio of the greatest width of the linking channel (3) and/or of the width of the inlet opening (2) to the width of the part channels (7) is greater than 2.

4. (currently amended) ~~Component~~ The component as defined in claim 1, characterized ~~in that~~ wherein the ratio of the length to the width of the part channels (7) is from 1:1 to 20:1.

5. (currently amended) ~~Component~~ The component as defined in claim 1, characterized ~~in that~~ wherein the ratio of the width of the mixing zone (5) to the width of the part channels (7) is greater than 2.

6. (currently amended) ~~Component~~ The component as defined in claim 1, characterized ~~in that additionally it has~~ and further comprising at least one flow-through opening (9).

7. (currently amended) ~~Component~~ The component as defined in claim 4 6, characterized ~~in that~~ wherein at least one of the inlet openings (2) or flow-through openings (9) or the mixing zone (5) is enclosed by the plane of the disk and that the linking channel (3) is formed by an indentation.

8. (currently amended) ~~Component~~ The component as defined in claim 4 6, characterized ~~in that~~ wherein at least one of the inlet openings (2) or flow-through openings (9) or the mixing zone (5) is disposed at the edge of the disk or as a recess at the edge of the disk.

9. (currently amended) ~~Component~~ The component as defined in claim 1, characterized ~~in that there are present~~ comprising at least two inlet openings (2), each connected with an outlet opening (4) in a communicating manner through a linking channel (3) disposed in the plane of the disk for at least two different feed streams, each inlet opening (2) being connected with the mixing zone (5) through the a linking channel (3).

10. (currently amended) ~~Component~~ The component as defined in claim 9, characterized ~~in that there are present~~ comprising two inlet openings (2) for two different feed streams, each inlet opening (2) being connected with the mixing zone (5) through

one linking channel (3) and the outlet openings (4) of the two linking channels (3) being disposed opposite one another.

11. (currently amended) ~~Component~~ The component as defined in claim 1, ~~characterized in that wherein~~ the outlet openings (4) are arranged on a circular line.

12. (currently amended) ~~Component~~ The component as defined in claim 1, ~~characterized in that it has~~ and further comprising additional through-holes (12) and additional part channels (13) the latter being integrated into the microstructure units (6) and being separated from the part channels (7).

13. (currently amended) ~~Static~~ A static micromixer which ~~has~~ comprising a housing (11) with at least 2 fluid inlets (12a) and at least one fluid outlet (16) and at least two disks as defined in claim 1 arranged into a stack in the housing (11),

wherein the disks (1) are superposed on one another so that the inlet openings (2) form subsidiary channels for introducing a particular feed stream and the mixing zones (5) form a main channel for removing the product stream, and the main and subsidiary channels extend through the stack.

14. (currently amended) ~~Micromixer~~ The micromixer as defined in claim 13, ~~characterized in that wherein~~ the linking channels (3) of the disks (1) are formed by indentations and that the linking channels (3), before opening into the mixing zone (5), are divided into part channels (7) by the microstructure units (6) provided on the disks.

15. (currently amended) ~~Micromixer~~ The micromixer as defined in claim 13, ~~characterized in that wherein~~ the linking channels (3) of the disks (1) are formed by recesses in the disks (1), the disks (1) being arranged as intermediate disks between a cover disk and a bottom disk, and that the linking channels (3) before opening into the mixing zone (5) are divided into part channels (7) by microstructure units (6) provided on the cover disks and/or bottom disks.

16. (currently amended) ~~Micromixer~~ The micromixer as defined in claim 13,
~~characterized in that it has~~ and further comprising an integrated heat exchanger.

17. (currently amended) ~~Combustion~~ A combustion reactor having a micromixer with at least one component as defined in claim 1, at least one first connection for introducing a combustible liquid or gaseous medium, and at least one second connection for introducing a combustion reaction-promoting medium.

18-23. (canceled)